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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/796,527

03/09/2004

Takao Mori

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K&L Gates LLP
P. O. BOX 1135
CHICAGO, IL 60690

EXAMINER

LUND, JEFFRIE ROBERT

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/796,527	Applicant(s) MORI ET AL.	
	Examiner Jeffrie R. Lund	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11, 14-16 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11, 14-16 and 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03/09/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 10/153,453.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11, 14, 15, and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yonemitsu et al, US Patent 6,143,083, in view of Edwards et al, US Patent 5,259,881, and Martin, 4,492,180.

Yonemitsu et al teaches an apparatus that includes: a loadlock 300 for loading substrates into the apparatus; a first film formation unit 701 including a plurality of vacuum chambers 70 for sequential deposition of a plurality of layers around a vacuum transfer chamber 55; a second film formation unit 701' including a plurality of vacuum chambers 70' for sequential deposition of a plurality of layers around a second vacuum transfer chamber; and an intermediate transfer chamber 90 that connects. (Figure 3A and 3B)

Yonemitsu et al differs from the present invention in that Yonemitsu et al does not teach: a third film formation unit; a first, second, or third alignment mechanism for aligning a mask to the substrate and detachably attaching the mask and the substrate; the second alignment mechanism connects the first and second film formation units, and the third alignment mechanism connects the first and second film formation units; the alignment mechanism includes an attachment fixture and a separating mechanism

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for attaching and separating the mask from the substrate holder; or a second electrode formation unit (Figure 13).

Edwards et al teaches two processing apparatus 12, 14 connected by an alignment chamber 16 (Figure 1).

Martin teaches an alignment means that includes an alignment mechanism 20 for aligning a mask 30, having openings corresponding 102, 104 to the predetermined pattern, to the substrate 64 and for detachably attaching the mask and the substrate. (Figure 3)

The motivation for adding a third film forming unit to the apparatus of Yonemitsu et al is to deposit a third layer. Furthermore, it has been held that: claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danley*, 120 USPQ 528, 531, (CCPQ 1959); “Apparatus claims cover what a device is, not what a device does” (Emphasis in original) *Hewlett-Packard Co. V. Bausch & Lomb Inc.*, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990); and a claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus “if the prior art apparatus teaches all the structural limitations of the claim *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). Also see MPEP 2114.

The motivation for connecting the first, second and third film formation units of Yonemitsu et al with alignment chambers is to enable the substrate to be aligned between each film formation units as taught by Edwards et al.

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The motivation for adding an alignment mechanism for aligning a mask to the substrate and detachably attaching the mask and the substrate to the apparatus of Yonemitsu et al is to enable the apparatus of Yonemitsu et al to adjust the position of the mask and deposit a layer in the desired location as taught by Martin.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to: add a third film forming unit to the apparatus of Yonemitsu et al; connect the first, second and third film formation units of Yonemitsu et al with alignment chambers as taught by Edwards et al; and add an alignment mechanism for aligning a mask to the substrate and detachably attaching the mask and the substrate to the apparatus of Yonemitsu et al as taught by Martin.

3. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yonemitsu et al, Edwards et al, and Martin as applied to claims 11, 14, 15, and 18-21 above, and further in view of Yamazaki et al, US Patent Application Publication 2001/0006827.

Yonemitsu et al, Edwards et al, and Martin differ from the present invention in that they do not teach a magnetic attachment fixture.

Yamazaki et al teaches a magnetic attachment fixture 207, 208, 210 that forms a sandwich with the substrate 203.

The motivation for replacing the attachment fixture of Yonemitsu et al, Edwards et al, and Martin with the magnetic attachment fixture of Yamazaki et al is to provide an alternate attachment means. Furthermore, it has been held that the simple substitution of one known element for another to obtain predictable results is obvious (see *KSR*

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International Co. v. Teleflex Inc.).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the attachment means of Yonemitsu et al, Edwards et al, and Martin with the magnetic attachment means of Yamazaki et al.

Response to Arguments

4. Applicant's arguments with respect to claims 11, 14-16, and 18-21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrie R. Lund whose telephone number is (571) 272-1437. The examiner can normally be reached on Monday-Thursday (10:00 am - 9:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on (571) 272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeffrie R. Lund/
Primary Examiner
Art Unit 1792

JRL
6/8/09